Application No.: Not Yet Assigned Docket No.: HO-P03263US0

Amendment dated: December 20, 2005

First Preliminary Amendment

AMENDMENTS TO THE CLAIMS

1. (Original) A cell microchip comprising a plastic substrate which a micro flow channel

is formed thereon.

2. (Original) The cell microchip according to claim 1, wherein a cross-section of the

micro flow channel is rectangular, triangular, circular, oval or a cross-sectional shape

thereof.

3. (Original) The cell microchip according to claim 2, wherein a long or short side or a

diameter of the cross-section of the micro flow channel is 2 to 200 mm.

4. (Original) The cell microchip according to any one of claims 1 to 3, wherein the

micro flow channel has one or more junctions.

5. (Original) The cell microchip according to claim 4, wherein the junction is a 3-

pronged junction composed of a flow channel (A), a flow channel (B) and a flow

channel (C).

6. (Currently amended) The cell microchip according to any one of claims 1 to 5 claim

1, wherein the micro flow channel constitutes one measurement system using cells,

and multiple measurement systems are formed on the plastic substrate.

7. (Currently amended) The cell microchip according to any one of claims 1 to 6 claim

 $\underline{1}$, wherein the plastic substrate is formed from an epoxy resin.

8. (Currently amended) The cell microchip according to any one of claims 1 to 7 claim

1, wherein the cell microchip has a haze value of 10% or less.

9. (Currently amended) The cell microchip according to any one of claims 1 to 8 claim

1, wherein the cell microchip has a light transmittance of 88% or more.

10. (Currently amended) A method of measurement using cells, which comprises using

the cell microchip according to any one of claims 1 to 9 claim 1.

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11. (Currently amended) A biological assay method, which comprises using the cell

microchip according to any one of claims 1 to 9 claim 1.

12. (Original) A method of assaying the action of a chemical on cells by using a cell

microchip wherein a flow channel (A), a flow channel (B), a flow channel (C) into

which the flow channels (A) and (B) are merged, and a micro flow channel having a

3-pronged junction composed of the three flow channels are formed on a plastic

substrate, which comprises filling one of the flow channels (A) and (B) with a

medium to allow cells to grow or live therein, and injecting a chemical-containing

solution into the other to contact the chemical with the cells, wherein the flow

channel (C) is a passage of the medium or solution or a zone for assaying the action

of the chemical.

13. (Original) The method of assaying the action of a chemical according to claim 12,

wherein the contact of the cells with the chemical is carried out at the 3-pronged

junction.

14. (Original) The method of assaying the action of a chemical according to claim 12 or

13, wherein the cells, starting from one or more cells, grow or live linearly in a single

layer in the flow channel (A) or (B) that is a flow channel for proliferating or

surviving the cells.

15. (Original) The method of assaying the action of a chemical according to any one of

claims 12 to 14, wherein the action of a chemical on cells is examined more than once

by using a cell microchip having multiple micro flow channels formed on the plastic

substrate.

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